

Silicone Rubber for Ringing Cover Glasses

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Zut (Glyceel) (2) and fingernail polish are the coverslip ringing sealants used in most plant nematology laboratories. Two silicone rubber preparations, Dow Corning's Silastic® and General Electric's Silicone Seal® were evaluated as a slide ringing material during a period of 26 months. Direct from the tube both products were too thick to spread conveniently unless diluted 30 or 40% with naphtha solvent (ligroin). When thinned, the silicone materials could easily be applied using a fine brush or a hypodermic syringe as alluded to by Abu-Gharbieh and Smart (1).

Two series of slides were set up, one of temporary water-formalin mounts and the other of permanent glycerine mounts. One set of each series was stored at room temperature and the other set in a 66 C oven to hasten aging and decomposition. Zut-ringed slides were included as controls. Ten

slides of each series and storage environment were examined after 1, 2, 6, 12, 18, and 26 months.

Some water-formalin mounts sealed with silicone rubber or Zut and stored at room temperature lasted 18 months. However, most slides dried after 2 to 6 months. None retained the water-formalin mixture at the end of 1 month of oven storage. Glycerine mounts sealed with silicone rubber or Zut showed no signs of evaporation after 26 months at room temperature or at 66 C.

Except that silicone rubber sealed slides can be easily opened or trimmed with a razor or scalpel, there appears to be no distinct advantage over Zut-sealed mounts, although there might be special applications in certain cases. The silicone sealing materials are readily obtainable from local suppliers.

LITERATURE CITED

1. ABU-GHARBIEH, WALID, and GROVER C. SMART. 1968. A plastic bottle applicator for ringing slides with Zut. *Nematologica* 14:1. (Abstr.)
2. THORNE, G. 1935. Notes on free-living and plant parasitic nematodes: (4) A new slide-ringing material. *Proc. Helminthol. Soc. Wash.* 2:98.

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